WHAT IS CLAIMED IS:

1. A disk device comprising:

a controller which determines a linear velocity at the time of rotating a disk on the basis of given operation information and control information read from the disk;

a laser output determination circuit which determines a read laser output of a photodiode corresponding to the linear velocity determined by the controller and causes the photodiode to emit a laser light on the basis of a control signal corresponding to the determined read laser output; and

a sampling circuit which detects a laser light emitted by the photodiode and makes the control signal of the laser output determination circuit appropriate according to a sampling result obtained by performing the detection several times.

2. A disk device according to claim 1, wherein the laser output determination circuit determines the read laser output in proportion to a value of the linear velocity, and causes the photodiode to emit a laser light on the basis of a control signal corresponding to the determined read laser output.

3. A disk device according to claim 1, wherein, when a value of the linear velocity exceeds a predetermined threshold value, the laser output determination circuit changes the read laser output to

a predetermined value previously prepared, and causes the photodiode to emit a laser light on the basis of a control signal corresponding to the determined read laser output.

4. A disk device according to claim 1, wherein the laser output determination circuit determines a read laser output of a photodiode according to the linear velocity in consideration of management information of the disk and operation information such as a user-desired recording velocity and the like.

5. A disk device according to claim 1, further comprising:

a processing section which performs reproducing processing and recording processing for the disk according to a laser light emitted in the laser output determination circuit.

6. A disk device comprising:

a controller which determines a linear velocity in order to rotate a disk at a constant angular velocity by CAV (Constant Angular Velocity) control on the basis of given operation information and control information read from the disk;

a laser output determination circuit which determines a read laser output of a photodiode according to the linear velocity determined by the controller in addition to the control information and the operation information, and causes the photodiode to

emit a laser light on the basis of a control signal corresponding to the determined read laser output; and

a sampling circuit which detects a laser light emitted by the photodiode, and makes the control signal of the laser output determination circuit appropriate according to a sampling result obtained by performing the detection several times.

7. A disk device according to claim 6, wherein the laser output determination circuit determines the read laser output in proportion to a value of the linear velocity, and causes the photodiode to emit a laser light on the basis of a control signal corresponding to the determined read laser output.

8. A disk device according to claim 6, wherein, when a value of the linear velocity exceeds a predetermined threshold value, the laser output determination circuit changes the read laser output to a predetermined value previously prepared, and causes the photodiode to emit a laser light on the basis of a control signal corresponding to the determined read laser output.

9. A disk device according to claim 6, wherein the laser output determination circuit determines a read laser output of a photodiode according to the linear velocity in consideration of management information of the disk and operation information such as a user-desired recording velocity and the like.

10. A disk device according to claim 6, further comprising:

a processing section which performs reproducing processing and recording processing for the disk according to a laser light emitted by the laser output determination circuit.

11. A disk processing method comprising:

determining a linear velocity at the time of rotating a disk on the basis of given operation information and control information read from the disk;

determining a read laser output of a photodiode according to the determined linear velocity, and causing the photodiode to emit a laser light on the basis of a control signal corresponding to the determined read laser output; and

detecting a laser light emitted by the photodiode, and making the control signal of the laser output determination circuit appropriate according to a sampling result obtained by performing the detection several times.

12. A disk processing method according to claim 11, wherein the read laser output is determined in proportion to a value of the linear velocity to cause the photodiode to emit a laser light on the basis of a control signal corresponding to the determined read laser output.

13. A disk processing method according to

claim 11, wherein, when a value of the linear velocity exceeds a predetermined threshold value, the read laser output is changed to a predetermined value previously prepared to cause the photodiode to emit a laser light on the basis of a control signal corresponding to the determined read laser output.

14. A disk processing method according to claim 11, wherein the determining a laser output determines a read laser output of a photodiode according to the linear velocity in consideration of management information of the disk and operation information such as a user-desired recording velocity and the like.

15. A disk processing method according to claim 11, further comprising:

performing reproducing processing and recording processing for the disk according to a laser light emitted by the laser output determination circuit.

16. A disk processing method comprising:

determining a linear velocity in order to rotate a disk at a constant angular velocity by CAV (Constant Angular Velocity) control on the basis of given operation information and control information read from the disk;

determining a read laser output of a photodiode according to the linear velocity determined by the controller, and causing the photodiode to emit a laser

light on the basis of a control signal corresponding to the determined read laser output; and

detecting a laser light emitted by the photodiode by a monitor, and making the control signal of the laser output determination circuit appropriate according to a sampling result obtained by performing the detection several times.

17. A disk processing method according to claim 16, wherein the read laser output is determined in proportion to a value of the linear velocity to cause the photodiode to emit a laser light on the basis of a control signal corresponding to the determined read laser output.

18. A disk processing method according to claim 16, wherein, when a value of the linear velocity exceeds a predetermined threshold value, the read laser output is changed to a predetermined value previously prepared to cause the photodiode to emit a laser light on the basis of a control signal corresponding to the determined read laser output.

19. A disk processing method according to claim 16, wherein the determining a laser output determines a read laser output of a photodiode according to the linear velocity in consideration of management information of the disk and operation information such as a user-desired recording velocity and the like.

20. A disk processing method according to claim 16, further comprising:

performing reproducing processing and recording processing for the disk according to a laser light emitted by the laser output determination circuit.